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Please find below and/or attached an Office communication concerning this application or proceeding.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (U.S. Pat. No. RE36510) in view of Beaudoin et al. (U.S. Pat. No. 6047250).

Burns teaches a method and system for passively operating and monitoring the service of a work vehicle during distribution of fluid products from a service vehicle to one or more fill ports of the work vehicle, each said fill port having an identifying data source associated therewith for identifying at least the fill port and the type of fluid product appropriate for input thereto (see Abstract; col. 1, lines 13-24; col. 7, lines 62-67; col. 8, lines 1-5, lines 61-67 and col. 9, lines 1-13), comprising the steps and means of: making ready the means for distribution of a particular type of fluid product (col. 10, lines 13-67); determining at the service vehicle the type of fluid product being made ready for distribution (col. 10, lines 13-67); obtaining at the work vehicle a first set of data from a data source associated with a particular vehicle port selected for service, and transmitting said first set of data to the service vehicle (Fig. 1; col. 6, lines 13-28,

lines 38-67; col. 8, lines 61-67; and col. 9, lines 1-13); determining whether or not the selected port is about to be serviced with an appropriate fluid product, and generating a signal commensurate therewith (Fig. 1; col. 8, lines 61-67; col. 9, lines 1-13 and col. 10, lines 58-67); distributing the fluid product to the selected port (col. 11, line 60 to col. 12, line 4); obtaining at the service vehicle a second set of data associated with the distribution of the particular type of fluid product to the selected port (col. 7, lines 12-45 and col. 12, lines 5-31); and (g) logging the signal, the received first set of data and the second set of data (col. 7, lines 62-67; col. 8, lines 1-5 and col. 12, lines 40-56). Burns also teaches a computer program embodied on a computer readable medium for passively monitoring the servicing of a vehicle during distribution of fluid products thereto (see Fig. 1; col. 5, lines 56-67 and col. 6, lines 1-13), comprising: (a) a code segment that causes a first set of data, obtained from a remote sensor and associated with a particular vehicle port to be serviced, to be received at a service vehicle (col. 5, lines 56-67; col. 6, lines 1-13 and col. 9, lines 37-67); (b) a code segment that causes a determination to be made as to the type of fluid product being made ready for delivery to a vehicle port and whether or not said first set of data identifies a particular port intended to be serviced with the type of fluid product, and that causes a signal to be generated commensurate therewith (Fig. 1; col. 8, lines 61-67; col. 9, lines 1-13, lines 47-52; col. 10, lines 13-15 and lines 58-67); (c) a code segment that causes a second set of data, associated with distribution of a fluid product to the selected port, to be obtained (Fig. 1; col. 7, lines 12-45 and col. 12, lines 5-31); and (d) a code segment that causes the signal, the first set of data

and the second set of data to be logged (Fig. 1; col. 7, lines 62-67; col. 8, lines 1-5 and col. 12, lines 40-56).

Burns do not state explicitly: using a hand-held unit to transmit said first set of data, obtained from a probe and associated with a particular vehicle port to be serviced, to said service vehicle; repeating said steps of delivering fluid to a particular vehicle port until service of each port on the vehicle is complete; a horn is actuated by the signal to validate selection of the port as the intended port; the signal causes the sounding of an alarm, the alarm warning of improper distribution of the product for receipt of the fluid product.

Beaudoin et al. disclose a system and method for monitoring fluid distribution, and teach: using a hand-held unit to transmit a first set of data. obtained from a probe and associated with a particular vehicle port to be serviced, to a service vehicle (col. 5, lines 6-34, lines 61-67; and col. 9, lines 1-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the Burns' hand-held unit by the Beaudoin hand-held RF data communication terminal in order to transmit information obtained at a vehicle port to a service vehicle unit (Beaudoin et al., Abstract).

Burns teaches one repeating the said steps to deliver various types of fluid to a plurality of customer vehicles (Fig. 1 and col. 6, lines 47-67; col. 11, lines 3-14 and col. 12, lines 5-39). In view of the teaching of Burns, one having ordinary skill in the art would be able to apply the same technique to carry out the method

for a plurality of ports on one vehicle. The mere application of a known method to a group of instances by those skilled in the art would have been obvious.

Burns teaches one using a series of beeps to validate selection of the port as the intended port (col. 11, lines 26-41). On the other hand, Beaudoin et al. teach a horn controlling means for controlling the horn of the customer vehicle, and making a sound, whenever needed in monitoring fluid distribution for heavy duty vehicles, by use of the horn controller (col. 7, lines 5-6 and col. 9, lines 1-17). It would have been obvious to include the teaching of Beaudoin horn controller in the Burns system in order to provide a better means for making a warning sound in validating the selection of the port (Beaudoin, et al., col. 9, lines 1-17).

Beaudoin et al. further teach that: a horn is actuated by the signal to validate selection of the port as the intended port (col. 7, lines 5-6 and col. 9, lines 1-17); and the signal causes the sounding of an alarm, the alarm warning of improper distribution of the product (col. 7, lines 5-6 and col. 9, lines 1-17). It would have been obvious to include the teaching of Beaudoin horn controller and warning means in the Burns system in order to verify distribution of proper fluid to the appropriate port on a customer vehicle (Beaudoin, et al., col. 9, lines 1-17).

3. Claims 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (U.S. Pat. No. RE36510) in view of Beaudoin et al. (U.S. Pat. No. 6047250).

Burns further teaches a system, method and apparatus for passively monitoring distribution of fluid products from distribution sources to fill ports (or

tanks) on a vehicle (see abstract; col. 1, lines 13-24; col. 7, lines 62-67 and col. 8, lines 1-5), comprising: a port identifying step and means associated with each fill port on a vehicle to be serviced, said port identifying step and means containing port data relating to the identity of the vehicle, the identity of the fill port, and the type of material to be dispensed to the port (Fig. 1; col. 6, lines 13-28, lines 38-67; col. 8, lines 61-67; col. 9, lines 1-13 and col. 10, lines 58-67); reader step and means for reading said port data and downloading same to an on-board computer associated with the distribution sources of said fluid products (Fig. 1; col. 6, lines 13-28, lines 38-67; col. 8, lines 61-67 and col. 9, lines 1-13); flow monitoring and controlling step and means associated with said on-board computer and the distribution sources and operative to generate flow data indicating a particular distribution source, the type of fluid to be dispensed from said particular source, and the volume of fluid actually dispensed from said particular source to a particular port (col. 5, lines 56-67; col. 6, lines 1-13, lines 47-67; col. 7, lines 1-5; col. 10, lines 42-57; col. 11, lines 60-67 and col. 12, lines 1-4); and step and means for producing a record of said port data, said flow data (col. 7, lines 62-67; col. 8, lines 1-5 and col. 12, lines 40-56). Burns further teaches that: said port data includes information relating to the type of material to be distributed to a particular type of port (col. 6, lines 13-28 and col. 8, lines 31-60); the flow monitoring step and means includes Delivery Lists identifying the type of material to be put into a particular type of port (col. 6, lines 13-37; col. 9, lines 63-67 and col. 10, lines 13-57); step and means for determining the location of said vehicle to be serviced and the time of servicing, and for reporting same to

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said step and means for producing a record whereby such location and time of servicing is included in said record (col. 6, lines 29-4 and col. 12, lines 5-31); said reader step and means is operative to generate operator data identifying the operator responsible for servicing said vehicle, and to transmit said operator data to said receiver (col.5, lines 28-67 and col. 6, lines 1-13); said reader step and means is operative to generate operator data identifying the operator responsible for servicing said vehicle and for transmitting said operator data to said receiver (col. 8, lines 61-67; col. 9, lines 1-13; and col.12, lines 40-56).

Burns does not mention that: step and means for transmitting said port data to a remote receiver; step and means associated with said flow monitoring step and means for comparing said port data to said flow data and operative to generate an alarm in the event that any aspect of said port data is incompatible with any aspect of said flow data; step and means for producing a record of said port data, said flow data and the fact that an alarm was generated; using lookup table to store the data about the type of material to be put into a particular port; use of an array of organized indicators and associated set of code terms to uniquely identify a particular vehicle, a particular port and the type of material to be distributed to said particul port.

Beaudoin et al., disclose a system for monitoring fluid distribution for heavy duty vehicles and teach: step and means for transmitting the tank identifying data collected from a handheld data terminal to a remote receiver mounted to a customer heavy duty vehicle (see abstract; col. 3, lines 24-50 and col. 8, lines 50-58); step and means for comparing said tank identifying data to

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flow data and operative to generate an alarm in the event that any aspect of said tank data is incompatible with any aspect of said flow data (col. 9, lines 1-17); step and means for producing a record of said tank data, said flow data and the fact that an alarm was generated (col. 8, lines 59-67 and col. 9, lines 1-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teachings of Beaudoin data communication mechanism, alarm generation mechanism, and job logging mechanism in the Burns system in order to provide the operator with an efficient way to communicate with the remote receiver, and to provide a step and means for logging the operation of the system more effectively (see Abstract; col. 8. lines 59-67 and col. 9, lines 1-30).

It is deemed that a data structure such as a lookup table is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a lookup table for storing well organized and repetitive data records about the type of products to be distributed in order to facilitate the retrieval of the stored data for monitoring the delivery of fluids to a customer vehicle.

It is further deemed that said array of organized indicators and said associated set of code terms are equivalent to the key fields and the primary key which makes a row of data unique and identifiable in a relational database table. It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a primary key constraint to said lookup table in order to uniquely identify each row of stored data about said vehicle, said port

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and said type of material to be distributed to said port. The mere application of a known technique to a specific instance by those skilled in the art would have been obvious and is within the level of ordinary skill in the art.

Response to Arguments

4. Applicant's arguments filed on 02/25/2003 have been fully considered but they are not persuasive.

The new limitations added in amendment "a" has been found in reference Beaudoin et al., and the rejection to those newly added limitations along with all other claims set forth above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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April 30, 2003

John Barlow Supervisory Patent Examiner Technology Center 2800